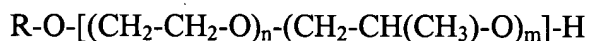
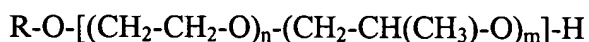


**REPLACEMENT CLAIM SET (WITH CHANGES NOTED)**

- 1) (CURRENTLY AMENDED) A method for deinking waste paper comprising the steps of:
  - a) converting the waste paper to a non-alkaline or low alkaline pulp slurry;
  - b) contacting the pulp slurry with a deinking blend comprising a first alkoxyated fatty alcohol and a first fatty acid, wherein said deinking blend comprises from about 20 wt.% to about 60 wt.% of said first fatty acid; and
  - c) separating ink from the pulp slurry by washing and/or flotation.
- 2) (ORIGINAL) The method of claim 1, wherein the first fatty acid is non-alkoxyated.
- 3) (ORIGINAL) The method of claim 1, wherein the first fatty acid is more than 20 wt% fatty acid having at least 16 carbon atoms and less than 60 wt% of saturated fatty acid having 14 carbons or less.
- 4) (ORIGINAL) The method as in claim 1, wherein the first fatty acid comprises 6 to 20 carbon atoms.
- 5) (ORIGINAL) The method of claim 1, wherein, in step b), the deinking blend further comprises a second alkoxyated fatty alcohol.
- 6) (ORIGINAL) The method of claim 5, wherein the second alkoxyated fatty alcohol is of the formula:



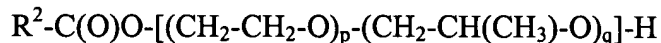
- a) wherein:
  - b) R is a straight or branched alkyl group;
  - c) n is from about 10 to about 100;
  - d) m is from about 1 to about 35; and
  - e) said n  $\text{-(CH}_2\text{-CH}_2\text{-O)-}$  units and said m  $\text{-(CH}_2\text{-CH(CH}_3\text{)-O)-}$  units are ordered in block or random format in any order or sequence.
- 7) (ORIGINAL) The method of claim 1, wherein the first alkoxyated fatty alcohol is of the formula:



- a) wherein:
- b) R is a straight or branched alkyl group;

- c) n is from about 5 to about 40;
  - d) m is from about 0 to about 20; and
  - e) said n  $-(\text{CH}_2-\text{CH}_2-\text{O})-$  units and said m  $-(\text{CH}_2-\text{CH}(\text{CH}_3)-\text{O})-$  units are ordered in block or random format in any order or sequence.
- 8) (ORIGINAL) The method of claim 7, wherein R is a C6 to C20 alkyl.
  - 9) (ORIGINAL) The method of claim 1, further comprising adding sodium silicate or sodium sulfite or a combination thereof to the pulp slurry.
  - 10) (ORIGINAL) The method of claim 1, wherein separating ink from the pulp slurry is carried out by flotation.
  - 11) (ORIGINAL) The method of claim 1, further comprising adding a flotation additive to the slurry before or during separating ink from the pulp slurry.
  - 12) (ORIGINAL) The method of claim 10, further comprising adding one cationic additive to the slurry before or during the flotation.
  - 13) (ORIGINAL) The method of claim 12, wherein the cationic additive is a cationic polymer.
  - 14) (ORIGINAL) The method of claim 13, wherein the cationic additive is a cationic polyamine.
  - 15) (ORIGINAL) The method of claim 1, wherein the first alkoxyated fatty alcohol comprises at least 5 moles of ethoxylation.
  - 16) (ORIGINAL) The method of claim 1, wherein the alcohol portion of the first alkoxyated fatty alcohol comprises 6 to 20 carbon atoms.
  - 17) (ORIGINAL) The method of claim 1 wherein the pulp slurry in step a) has a pH of from about 6.0 to about 8.8.
  - 18) (ORIGINAL) The method of claim 1, wherein the pulp slurry in step a) has a pH of from about 6.8 to about 7.2.
  - 19) (ORIGINAL) The method of claim 1, wherein the blend is a liquid at a temperature of at least 22 °C.
  - 20) (CANCELED)
  - 21) (CANCELED)
  - 22) (ORIGINAL) The method of claim 1, wherein the first alkoxyated fatty alcohol and first fatty acid are present in a ratio of from about 1:2 to about 2:1 by weight.

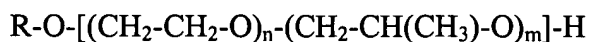
- 23) (CANCELED)
- 24) (CANCELED)
- 25) (ORIGINAL) The method of claim 5, wherein the blend comprises alkoxyated fatty alcohol and fatty acid in a ratio of from about 1:2 to about 3:1 by weight.
- 26) (ORIGINAL) The method of claim 1, wherein the blend comprises water or other diluent.
- 27) (ORIGINAL) The method of claim 1, wherein the blend comprises from about 0 to about 25 weight % water or other diluent.
- 28) (ORIGINAL) The method of claim 1, wherein the first fatty acid is a tall oil fatty acid.
- 29) (ORIGINAL) The method of claim 1, wherein the blend further comprises a second fatty acid, wherein the second fatty acid is an alkoxyated fatty acid of the formula:



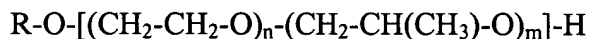
wherein:

- a)  $R^2$  is a straight or branched alkyl group comprising at least 6 carbon atoms;
  - b) p is from about 10 to about 100;
  - c) q is from about 0 to about 50; and
  - d) said p  $-(CH_2-CH_2-O)-$  units and said q  $-(CH_2-CH(CH_3)-O)-$  units are ordered in block or random format in any order or sequence.
- 30) (ORIGINAL) The method of claim 29, wherein  $R^2$  is a C6 to C20 alkyl.
  - 31) (CURRENTLY AMENDED) A method for deinking waste paper comprising the steps of:
    - a) converting the waste paper to a pulp slurry;
    - b) contacting the pulp slurry with a deinking blend comprising a first alkoxyated fatty alcohol and a first fatty acid, wherein said deinking blend comprises from about 20 wt.% to about 60 wt.% of said first fatty acid;
    - c) separating ink from the pulp slurry by flotation; and
    - d) adding at least one flotation additive during or prior to flotation.
  - 32) (ORIGINAL) The method of claim 31, wherein the first fatty acid is non-alkoxyated.
  - 33) (ORIGINAL) The method of claim 31, wherein the deinking blend comprises a first fatty acid that is more than 20 wt% fatty acids having at least 16 carbon atoms and less than 60 wt% of saturated fatty acids having 14 carbons or less.

- 34) (ORIGINAL) The method as in claim 31, wherein the first fatty acid comprises 6 to 20 carbon atoms.
- 35) (ORIGINAL) The method of claim 31, wherein, in step b), the deinking blend further comprises a second alkoxyated fatty alcohol.
- 36) (ORIGINAL) The method of claim 31, wherein the second alkoxyated fatty alcohol is of the formula:



- a) wherein:
- b) R is a straight or branched alkyl group;
- c) n is from about 10 to about 100;
- d) m is from about 1 to about 35; and
- e) said n  $\text{-(CH}_2\text{-CH}_2\text{-O)-}$  units and said m  $\text{-(CH}_2\text{-CH(CH}_3\text{)-O)-}$  units are ordered in block or random format in any order or sequence.
- 37) (ORIGINAL) The method of claim 31, wherein the flotation additive is a cationic additive.
- 38) (ORIGINAL) The method of claim 31, wherein the flotation additive is a cationic polymer.
- 39) (ORIGINAL) The method of claim 31, wherein the flotation additive is a cationic polyamine.
- 40) (ORIGINAL) The method of claim 31, wherein the first alkoxyated fatty alcohol comprises at least 5 moles of ethoxylation.
- 41) (ORIGINAL) The method of claim 31, wherein the alcohol portion of the first alkoxyated fatty alcohol comprises 6 to 20 carbon atoms.
- 42) (ORIGINAL) The method of claim 31, wherein the pulp slurry in step a) is non-alkaline or low-alkaline.
- 43) (ORIGINAL) The method of claim 31, wherein the first alkoxyated fatty alcohol is of the formula:



wherein:

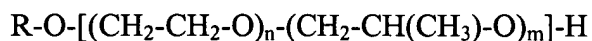
- a) R is a straight or branched alkyl group;
- b) n is from about 5 to about 40;

- c) m is from about 0 to about 20; and
  - d) said n  $-(\text{CH}_2-\text{CH}_2-\text{O})-$  units and said m  $-(\text{CH}_2-\text{CH}(\text{CH}_3)-\text{O})-$  units are ordered in block or random format in any order or sequence.
- 44) (ORIGINAL) The method of claim 43, wherein R is C6 to C20 alkyl.
- 45) (ORIGINAL) The method of claim 31, wherein the pulp slurry in step a) has a pH of from about 5.5 to about 12.
- 46) (ORIGINAL) The method of claim 31, wherein the pulp slurry in step a) has a pH of from about 6.0 to about 8.8.
- 47) (ORIGINAL) The method of claim 31, wherein the pulp slurry in step a) has a pH of from about 6.8 to about 7.2.
- 48) (ORIGINAL) The method of claim 31, wherein the blend further comprises a second fatty acid, wherein the second fatty acid is an alkoxyated fatty acid of the formula:
- $$\text{R}^2-\text{C}(\text{O})\text{O}-[(\text{CH}_2-\text{CH}_2-\text{O})_p-(\text{CH}_2-\text{CH}(\text{CH}_3)-\text{O})_q]-\text{H}$$
- wherein:
- a)  $\text{R}^2$  is a straight or branched alkyl group comprising at least 6 carbon atoms;
  - b) p is from about 10 to about 100;
  - c) q is from about 0 to about 50; and
  - d) said p  $-(\text{CH}_2-\text{CH}_2-\text{O})-$  units and said q  $-(\text{CH}_2-\text{CH}(\text{CH}_3)-\text{O})-$  units are ordered in block or random format in any order or sequence.
- 49) (ORIGINAL) The method of claim 48, wherein  $\text{R}^2$  is C6 to C20 alkyl.
- 50) (ORIGINAL) The method of claim 31, wherein the blend is a liquid at a temperature of at least 22 °C.
- 51) (CANCELED)
- 52) (CANCELED)
- 53) (ORIGINAL) The method of claim 31, wherein the first alkoxyated fatty alcohol and first fatty acid are present in a weight ratio of from about 1:2 to about 2:1 by weight.
- 54) (CANCELED)
- 55) (CANCELED)
- 56) (ORIGINAL) The method claim 36, wherein the blend comprises alkoxyated fatty alcohol and fatty acid in a ratio of from about 1:2 to about 3:1 by weight.

- 57) (ORIGINAL) The method of claim 31, wherein the blend comprises water or other diluent.
- 58) (ORIGINAL) The method of claim 31, wherein the blend comprises from about 0 to about 25 weight % water or other diluent.
- 59) (ORIGINAL) The method of claim 31, wherein the fatty acid is a tall oil fatty acid.
- 60) (CURRENTLY AMENDED) A method for deinking waste paper comprising the steps of:

- a) converting the waste paper to a non-alkaline or low alkaline pulp slurry;
  - b) contacting the pulp slurry with a deinking blend comprising a first alkoxylated fatty alcohol and a first fatty acid, wherein said deinking blend comprises from about 20 wt.% to about 60 wt.% of said first fatty acid; and
  - c) separating ink from the pulp slurry by washing and/or flotation;
- wherein the first alkoxylated fatty alcohol comprises at least five moles of ethoxylation; and
- wherein the first fatty acid is a non-alkoxylated C6 to C20 fatty acid.

- 61) (ORIGINAL) The method of claim 60, wherein the blend comprises a second fatty acid wherein the second fatty acid is an alkoxylated fatty acid.
- 62) (ORIGINAL) The method of claim 60, wherein the first alkoxylated fatty alcohol is of the formula:

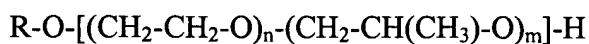


- a) wherein:
  - b) R is a straight or branched alkyl group;
  - c) n is from about 5 to about 40;
  - d) m is from about 0 to about 20; and
  - e) said n  $\text{-(CH}_2\text{-CH}_2\text{-O)-}$  units and said m  $\text{-(CH}_2\text{-CH(CH}_3\text{)-O)-}$  units are ordered in block or random format in any order or sequence.
- 63) (ORIGINAL) The method of claim 62, wherein n is 12 to 25 and m is 0.
- 64) (ORIGINAL) The method of claim 62, wherein the first fatty acid is more than 20 wt% fatty acids having at least 16 carbon atoms and less than 60 wt% of saturated fatty acid having 14 carbons or less.
- 65) A method for deinking waste paper comprising the steps of:

- a) converting the waste paper to a pulp slurry;
  - b) contacting the pulp slurry with a deinking blend comprising a first alkoxyated fatty alcohol and a first fatty acid;
  - c) separating ink from the pulp slurry by flotation; and
  - d) adding at least one flotation additive during or prior to flotation;
- wherein the first alkoxyated fatty alcohol comprises at least five moles of ethoxylation; and
- wherein the first fatty acid is a non-alkoxyated C6 to C20 fatty acid.

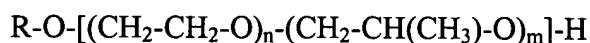
66) (ORIGINAL) The method of claim 65, wherein the blend further comprises a second fatty acid wherein the second fatty acid is an alkoxyated fatty acid.

67) (ORIGINAL) The method of claim 65, wherein the first alkoxyated fatty alcohol is of the formula:



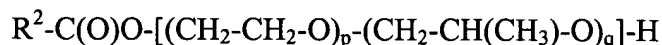
- a) wherein:
  - b) R is a straight or branched alkyl group;
  - c) n is from about 5 to about 40;
  - d) m is from about 0 to about 20; and
  - e) said n  $\text{-(CH}_2\text{-CH}_2\text{-O)-}$  units and said m  $\text{-(CH}_2\text{-CH(CH}_3\text{)-O)-}$  units are ordered in block or random format in any order or sequence.
- 68) (ORIGINAL) The method of claim 65, wherein n is 12 to 25 and m is 0.
- 69) (ORIGINAL) The method of claim 65, wherein the first fatty acid is more than 20 wt% fatty acids having at least 16 carbon atoms and less than 60 wt% of saturated fatty acid having 14 carbons or less.
- 70) (CURRENTLY AMENDED) A deinking composition comprising:
- a) a first fatty acid that is not alkoxyated and that comprises more than 20 wt% fatty acids having at least 16 carbon atoms and less than 60 wt% of saturated fatty acids having 14 carbons or less, wherein said deinking blend comprises from about 20 wt.% to about 60 wt.% of said first fatty acid;
  - b) a first alkoxyated fatty alcohol;
  - c) optionally a second fatty acid that is alkoxyated; and
  - d) optionally a second alkoxyated fatty alcohol.

- 71) (ORIGINAL) The composition of claim 70, wherein the first fatty acid comprises from about 20 wt % to about 90 wt % of first fatty acid having at least 16 carbon atoms.
- 72) (ORIGINAL) The composition of claim 70, wherein the first fatty acid with at least 16 carbon atoms are from about 40 wt % to about 90 wt % unsaturated.
- 73) (ORIGINAL) The composition of claim 70, wherein the first alkoxyated fatty alcohol has an HLB value of at least 13.
- 74) (ORIGINAL) The composition of claim 70, wherein the first alkoxyated fatty alcohol is of the formula:



wherein:

- a) R is a straight or branched alkyl group;
  - b) n is from about 5 to about 40;
  - c) m is from about 0 to about 20; and
  - d) said n  $-(CH_2-CH_2-O)-$  units and said m  $-(CH_2-CH(CH_3)-O)-$  units are ordered in block or random format in any order or sequence.
- 75) (ORIGINAL) The composition of claim 74, wherein n is 10 to 30 and m is less than 10.
- 76) (ORIGINAL) The composition of claim 74, wherein n is 12 to 25 and m is 0.
- 77) (ORIGINAL) The composition of claim 70, wherein the composition is a liquid at a temperature of at least 22 °C.
- 78) (ORIGINAL) The composition of claim 70, wherein the composition comprises an alkoxyated fatty acid, and said alkoxyated fatty acid is of the formula

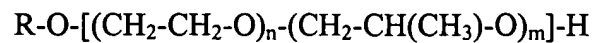


wherein:

- a)  $R^2$  is a straight or branched alkyl group comprising at least 6 carbon atoms;
  - b) p is from about 10 to about 100;
  - c) q is from about 0 to about 50; and
  - d) said p  $-(CH_2-CH_2-O)-$  units and said q  $-(CH_2-CH(CH_3)-O)-$  units are ordered in block or random format in any order or sequence.
- 79) (ORIGINAL) The composition of claim 70, further comprising a second alkoxyated fatty alcohol.



- 80) (ORIGINAL) The composition of claim 79, wherein the second alkoxyated fatty alcohol is of the formula:



- a) wherein:
- b) R is a straight or branched alkyl group;
- c) n is from about 10 to about 100;
- d) m is from about 1 to about 35; and
- e) said n  $\text{-(CH}_2\text{-CH}_2\text{-O)-}$  units and said m  $\text{-(CH}_2\text{-CH(CH}_3\text{)-O)-}$  units are ordered in block or random format in any order or sequence.